

Patagonian native plant extract can protect cells from arsenic toxicity

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Chronic toxic effects of arsenic resulting from drinking water are a human health problem, especially in South-America and Asia, where there is a correlation between oxidative stress, tumor promotion and arsenic exposure.. In order to examine their protective potential, the antioxidant activity in different Patagonian native plant extracts (Argentina) were determined in vitro in the Vero cell line (mammalian kidney). Experimentally, hydroperoxide, caspase activity and ROS level were assayed to evaluate the properties of eighteen extracts compared by ANOVA followed by the LSD Fisher test. Data showed that

arsenite was pro-oxidant in Vero cells in a time- and dose-dependent manner (logistic regression). Five plant extracts were found to counter the oxidative stress response. Therefore, antioxidant substances are being purified since they may have a protective activity against arsenite-induced renal injury.

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